

REMARKS/ARGUMENTS

Claims 1-21 are pending. Claims 1, 2, 4-8, 13-15 and 17-19 stand rejected under 35 U.S.C. § 103(a) as being anticipated by Patil (U.S. Patent No. 7,313,087) in view of Saleh (U.S. Patent No. 7,477,594) and Mekittikul (U.S. Patent Application Publication No. 2004/0179471). Dependent claims 3, 12 and 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Patil in view of Saleh and Mekittikul, and further in view of Swinkels (U.S. Patent No. 6,795,394). Dependent claims 9-10 and 20-21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Patil in view of Saleh and Mekittikul, and further in view of Trudel (U.S. Patent No. 7,450,497).

Applicants respectfully traverse the rejections and request their withdrawal in view of the remarks set forth herein. Claim 1 is amended to point out the claimed subject matter more clearly. Support can be found throughout the specification and drawings as originally filed.

Response to the Rejection of Independent Claim 1

Claim 1 provides a method for protecting a data service in a Metropolitan Area Transport Network including the following elements:

(A) establishing a work path for transporting a service between a source node and a work destination node of the service in the Metropolitan Area Transport Network (MATN), wherein the source node is a node in the MATN through which the service enters the MATN, the work destination node is a node via which the service in the work path leaves the MATN;

(B) setting a node other than the work destination node as a protection destination node;

establishing a protection path between the source node and the protection destination node for protecting the service in the work path, wherein the protection destination node is a node via which the service in the protection path leaves the MATN;

(C) the source node detecting a failure state of:

(a) a first path component comprising links of the work path and the protection path, and

(b) a node in the first path component;

(D) the work destination node and the protection destination node each detecting a failure state of a second path component comprising the links connecting the work destination node and the protection destination node to at least one data device that is connected to the data network, and if there is the failure, notifying the source node; and

(E) switching the data service in the work path to the protection path by the source node upon one or more of the following conditions: (a) when the failure state of the link of the work path or the failure state of the node in the link is detected, and (b) a failure state notice of the work destination node is received.

Applicants have carefully reviewed the Patil, Saleh and Mekittikul references and respectfully submit that the cited references fail to support the rejections set forth in the Office action.

As conceded in the Office action, Patil fails to mention features (C) and (D) of claim 1, and relies on Saleh for features missing from Patil. Applicants respectfully submit that Saleh fails to teach or suggest the features (C) and (D) of claim 1, for at least the reasons discussed below.

First, according to features (C) and (D) of claim 1, failure state detection is divided and performed by different nodes, i.e., the source node detects the failure state of a first path component, and the work destination node and the protection destination node each detects the failure states of a second path component.

Saleh, at column 7, lines 19-27, discloses “destination nodes (any type either working or protecting) reporting failure to source node”, i.e., a VP destination node detects a failure state along the VP and reports the failure state to VP source node, and the VP source node performs a switching process. Since the source node and the destination node of Saleh both process the failure state of the VP, and Saleh does not mention processing of any failure state of a path component other than the VP, thus Saleh fails to disclose or suggest the VP source node and VP destination node each detect the failure states of different path components.

Second, according to features (C) and (D) of claim 1, the first path component comprises links and nodes in the work path and the protection path which are within the

MATN, while the second path component comprising links connecting the work destination node and the protection destination node to at least one data device that is connected to the data network. Thus, the first path component and the second path component belong to different networks.

Saleh, however, focuses on 1:1 restoration applying to a VP, which is within one network, and thus fails to disclose or suggest failure detection of two different networks.

Therefore, Saleh fails to disclose or suggest the features (C) and (D) of claim 1.

Mekkittikul describes a protection scheme applied to a ring topology where a downstream node detects a failure state and broadcasts the failure state and a source node in the ring receives the failure state and redirects flows. Mekkittikul also fails to mention anything about a source node and a destination node each detecting the failure states of different path components, or about path components belonging to different networks. Thus, Mekkittikul fails to teach or suggest the feature (C) and (D) of claim 1.

Similarly, Swinkels and Trudel also fail to teach or suggest the features (C) and (D) of claim 1.

In view of the foregoing, Applicants respectfully submit that the cited references, taken alone or in combination, fail to teach or suggest at least the claimed features (C) and (D) of independent claim 1. Therefore, Applicants respectfully submit that independent claim 1 is patentably distinguishable from the cited references, and respectfully requests reconsideration and withdrawal of the rejections.

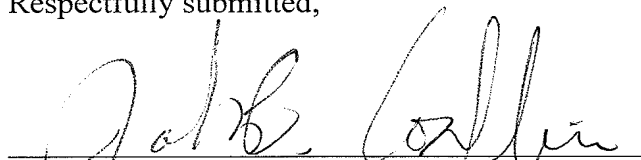
Response to the Rejections of dependent Claims 2-21

As for the dependent claims, they depend, directly or indirectly, from independent claim 1 and, therefore, include all of the limitations of base claim 1. Without addressing the assertions set forth in the Office action, which are not conceded, Applicants respectfully request withdrawal of the rejections of these dependent claims for the same reasons expressed above in connection with independent claim 1.

Conclusion

A prompt indication of allowability of all pending claims 1-21 is earnestly solicited. Should the examiner wish to discuss the foregoing, or any matter of form in an effort to advance this application toward allowance, he is urged to telephone the undersigned at the indicated number.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "John B. Conklin", is written over a horizontal line.

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